DOCUMENT RESUME

ED 161 598 RC 010 843

AUTHOR Bergsma, Harold M.
TITLE Education for International Development: Problems for Planned Change. A Presentation in the College of Education Dialogue Series, New Mexico State University.
PUB DATE 12 Oct 78
NOTE 32p.

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Colonialism; *Developing Nations; Economic Change; *Educational Alternatives; Foreign Countries; Futures (of Society); *History; *Rural Development; *Rural Education; Social Change

ABSTRACT

Colonial educational development viewed education as: 1) means of training an elite to maintain the imported political/economical system; 2) a vehicle for creating individuals thoroughly conversant with alien values; 3) a commodity for the few of intellectual capability; 4) a broad based entity predicated upon literature, science, math, and religious philosophy; and 5) an elitist function, making its leaders indispensable to the uninformed masses. During the periods of bold exportations, primary education, mass literacy education, education for functional rural living, and education for family health were not the concerns of the agencies who developed exams and curricula. In most ex-colonial states, the post-independence periods saw development of many secondary schools; however, these school systems lacked the control of the colonial period, were expensive due to increased numbers wanting education, and lacked the teachers previously provided by the colonizers. Nationalism, regionalism, and tribulism promoted controversy regarding standards, and degreed individuals took advantage of the situation, opening up schools with low standards and high fees while the pass rates on regional exams continued to fall. The orthodoxy of the sixties was a confident expansion of schools predicated upon the belief that education would enhance economic and political development, but it became clear that the schooled were unprepared for either the village or the modern sector. Among today's developing nations, there is sensitive concern for preservation of cultural values and for development assistance based upon the principle of "indigeniety". (JC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Harold M. Bergsma

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

NEW MEXICO STATE UNIVERSITY

A DIALOGUE SERIES Monograph

Education for International Development: Problems for Planned Change

ED161598

by Harold M. Bergsma

A Presentation in the College of Education
DIALOGUE SERIES

Thursday, October 12, 1978

RC 010843

EDUCATION FOR INTERNATIONAL DEVELOPMENT:

PROBLEMS FOR PLANNED CHANGE

A Presentation in the College of Education

DIALOGUE SERIES

New Mexico State University
Las Cruces, New Mexico

by

Harold M. Bergsma, Ph.D.
College of Education
New Mexico State University

October 12, 1978

EDUCATION FOR INTERNATIONAL DEVELOPMENT:

PROBLEMS FOR PLANNED CHANGE

A review of the history of education for development in the international arena, particularly among ex-British colonies, during the recent thirty years brings to mind the life cycles of two organisms, one a nematode worm, the other a headless acephalan. Such analogies have obvious limitations, but for the sake of example, each provides an account of the consequences of parasitism and immobile colony formation.

The expatriate who has lived in the Tropics for prolonged time periods frequently encounters persons who are suffering from elephantiasis. This writer has met many people who have been thus afflicted with grotesquely enlarged lower limbs, enormous scrotums weighing over fifty pounds, or pendulous elephantine breasts. These poor folk bear personal, physiological, social, and psychological trauma as a consequence of a gradual infestation of a microscopic, threadlike nematode worm whose larvae were transmitted by mosquitos or other arthropods into the bloodstream. Repeated infestation results in the migration of the microfilaria in body tissue to the lymphatic system. The organisms die and their calcified bodies plug the ducts, preventing return of lymph to the trunk of the body, resulting in fluid engorged tissue. The process of appendage growth is slow but steady, ending in disfunctionality, and later on becoming a physical burden to be endured. How this rather abhorrent disease relates to education for development will become apparent in later paragraphs.

A second example is a headless mollusk, the acephalan. These

shellfish attach themselves to large unmoving objects in the water and remain firmly anchored for the rest of their lives. These organisms lack a distinct head; in fact, no part of their body is specifically organized as the seat of the senses. When each dies, the calcified remains become the site for new mullosks which frequently adhere to each other. Generations of such organisms literally obscure the object upon which they rest. Some reference will again be made to the acephalan.

The history of education for development has been variously described by writers. The present study briefly delineates and defines four major stages which depict changing philosophies of education for development. They are: Period of Bold Exportations, Confident Implementation, National Development, and Thoughtful Diagnosis and Prescription.

THE PERIOD OF BOLD EXPORTATIONS - COLONIAL FOUNDATIONS

A number of international comparisons have been made in the literature of the colonial national development process. There are striking similarities in many of these accounts, though the specified administrative styles of the colonial administrators differ greatly from one country to the other, and from one historical era to another. Some of the essential characteristics of colonial development are as follows:

1. One of the major characteristics of education during the colonial period was that education was viewed by the colonial administrators as a means of training an elite who could maintain the imported political and economic system.

2. Education was the vehicle for creating a group of individuals who would become thoroughly conversant with alien values.

3. A third characteristic of this period was that education was for the few who demonstrated intellectual capability; in other words, for those who were not weeded out in a series of examinations over a period of time.

4. A fourth characteristic was that the education which was exported to the colonies was of the type referred to as grammar school education, i.e., a broad education in literature, science, mathematics, and religious philosophy. This high quality education was to be carefully and strictly administered to a few select persons who were to become a generation of elite leaders.

5. A fifth characteristic was that those who were educational leaders believed that their talents were indispensable to the uninformed masses who were incapable of organizing and reorganizing their own true interests, and therefore, if education was to become part of the development process, it could only take place through the efforts of a centrally located intellectual authority and decision-making group.

Adam Curle (1973) described the development process of three countries as related to the educational systems established in each. He contrasted three countries which were under British colonial rule--Ghana, Pakistan, and Nigeria. Each country experienced different forms of the same colonial educational system. In Pakistan, which was carved out of 1947 Independent India, an aristocratic philosophy was strongly adhered to, and the children of the already existent social elite,

from the native aristocracy, benefited most from colonial education. Curle stated that, "...although there were considerable differences between the pomp of the great princes and the power of British rulers, they had a great deal in common." When the British left the subcontinent, such values continued to persist and national plans strongly supported the development of higher education for a relatively small number of key persons. The situation in Ghana, on the other hand, was similar because higher education was stressed, and the establishment of the University College of the Gold Coast was reportedly to promote the training of an elite who could move the country toward independence. The Asquith Report (1945) stated specifically: "In the stage preparatory to self-government, universities have an important part to play; indeed, they may be indispensable. To them we must look for the production of men and women with the standards of public service and capacity for leadership which self-rule requires." The social system in Ghana was primarily non-elitist and variations of tribal (nation states) democracy prevailed, which led to controversy because of the elitist nature of the new University College. The lavish physical setting of the new College, the elitist selection process which resulted in an original group of 90, and the heavy impact of British curricula, weighed heavily on the newly formed non-colonial government in later years. Efforts were made to Africanize the curriculum; however, the College continued to offer a broad traditional education basically unrelated to Ghana's needs. In Nigeria, regional variations of a basic British colonial educational theme were the standard up

until Independence in 1959-60. The coastal areas enjoyed the greatest initial educational thrust and highly selective grammar schools were established with elitist titles, such as King's College or Government College. School leavers (graduates) from these highly traditional British schools suffered through examinations set in London, administered in Nigeria, and marked and graded in London. Those who passed with honor eventually became the nucleus for the first classes of the University College at Ibadan and other foreign institutions.

Each of the three examples above depicted the growth of an elitist colonial education on foreign soil which, in spite of national, social and political variations, persisted and became the foundation for development and dysfunction in later years. Similar accounts abound which repeat the same basic pattern of enthusiastic and bold exportation.

A recent publication by Ronald Dore, The Diploma Disease: Education, Qualifications and Development (1975), contrasted four country's developmental processes. Of particular interest are the situations depicted for Sri Lanka (Ceylon) and Kenya. In Ceylon, the English language was used in the schools and became the vehicle for providing entry to various levels of government service for the higher classes of the Sinhalese and Eurasians. After 1945, vernacular languages were introduced into the educational systems and national examinations replaced the British examinations. These were opened up to children from all walks of life. But the basic format was still adhered to, i.e., a traditional education, unrelated to development needs, which

produced a growing number of educated youths with high aspirations and who had basic elitist attitudes.

Kenya's educational system, which more recently emerged and became established after Independence, was based on the British model. Great efforts were made to transform the British system which was elitist and served colonial ends. In his well-known theme, "Education for Self-Reliance," Julius Nyerere, President, Tanzania, made a strong plea for abandonment of the British model and for the establishment of a new socialistic model to serve all the people (1964). Nyerere argued that colonial education induced attitudes of human inequality, that it supported the domination of the weak by the strong, that the values transmitted were not Tanzanian but British, and that such an education, which might have been relevant to bolster the colonial society, was highly irrelevant for national social development. Further, he stated that such an education was discriminatory, elitist, and favored separate racial or ethnic systems.

Nonetheless, it must be stated that the British were highly successful in establishing such educational systems in their colonies and these educational systems served colonial ends. In national leadership positions today--in all of the countries mentioned above--are national leaders who were educated in the traditional British manner. The majority of civil servants in these countries were similarly educated in traditional schools during the colonial period. In spite of the criticisms leveled at these educational systems by nationals as well as expatriates, these systems persisted and performed importantly

for the countries during post-Independence periods. To borrow a phrase from E. Rogers, the "diffusion of innovation" appeared to have been widespread, the "innovations" were prized by those in the educational systems, and those who hoped to use the system for social and economic gain. The lessons were all too well learned, to the extent that attempts to change these basically British patterns were met with resistance by those who had benefited much by them and who held key leadership positions with salaries "adjusted" to be similar to their British predecessors or present British counterparts still serving after Independence.

During these periods of bold exportations, primary education, mass literacy education, education for functional rural living, and education for improvement of family health were not the major concerns of those governmental agencies who developed the examinations and curricula for schools. Rather, a number of voluntary agencies and mission groups stressed mass education and women's education, many in order to establish a literate group able to read the Bible or other religious literature. These educational programs did not enjoy the prestige of government "Colleges" as the secondary schools were termed. Nor did they provide a launching pad for financial success. The very fact of their existence, however, increased the base from which elite "Colleges" could eventually recruit candidates. In many instances, the literate converts of mission educational systems found success in achieving entrance to secondary schools and later on, to teacher training colleges and universities.

The small groups which benefited from the colonial educational systems became the new leadership at the time of Independence. These well-educated elite confidently took over the reins and sought to establish replica systems with minor national, regional or tribal modifications. Young talent frequently was sent abroad to explore other educational systems such as those in the United States, Canada, and Soviet Block countries. These, when they returned later on, provided a whole host of ideas for change, though their own credentials were initially difficult to evaluate or equate to quality programs of British design.

CONFIDENT IMPLEMENTATION: POST-INDEPENDENCE

Edmund J. King, author of Other Schools and Ours, stated: "The adoption of even one item from an alien technology is usually the beginning of altered human relationships" (1967). The adoption en mass of a whole series of innovations, with little understanding of historical antecedents which brought them about, can create change at an alarming rate. This was especially true if social and economic incentive systems existed which would support the adoption of new ideas.

The writer worked as an educator in Nigeria for twelve years, five years prior to Independence and seven years after. Those years were exciting ones in terms of visible changes which occurred. In the pre-Independence era when few secondary schools existed in most of the northern divisions, recruitment of students was a problem. The story has been told repeatedly that, when education officers came to the

rural villages to recruit bright children for schools, the traditional elders viewed with alarm and suspicion these attempts to take the best youth away to an unknown fate. Consequently, many children who could not work the farms because of weakness, illness, partial blindness, or the like, were selected for schooling. A decade or two later, these same children, returning with an education, became teachers, clerks, and storekeepers and earned salaries which tripled the annual intake of their elders. Schooling became prized and in a decade, hundreds of hopeful children from all over Nigeria sat to take entrance examinations into secondary schools. The anxiety brought about by competition for the few available seats in secondary schools was acute. What had been spurned by many became the reason to live for their brothers.

During the post-Independence era in most ex-colonial states, educational planners moved to establish as many quality secondary schools as possible. But what had originally been tightly controlled systems, basically evaluated by alien administrators, became more loosely controlled systems, hard to staff with graduate faculty and expensive because of the sheer numbers to be educated. Few of the new schools had the "quality" or rigor of the old King's College or Government Colleges. Attempts were made in most of these states to bring the examination councils more closely in line with the national concerns, physically and philosophically. Regional Examination Councils replaced foreign examinations such as the Cambridge external examination system. But nationalism, regionalism, and tribalism reared their heads and controversy emerged over unequal pass-rates from one region to another.

Examinations became political--highly charged with controversy and suspicion.

During the initial phases soon after colonial rulers departed, most ex-colonial countries were faced with a lack of trained teachers and professors to man the burgeoning secondary schools and new universities. The dilution began when ministries of education approved alternative programs of teacher preparation which required less than a baccalaureate degree to teach junior secondary classes. During this period, Peace Corps teachers or their counterparts from Canada or the United Kingdom were avidly sought and often became the backbone of the staff in schools, though many of these teachers were not teachers, but holders of a degree in mathematics, English, or one of the sciences.

Pass rates began to decline, although there were greater numbers passing through the various secondary schools. It was evident that quality teacher production would have to be given a higher priority if standards were to be maintained. Schooling and certification, as opposed to education, took on increasing importance. In India, Ghana, Nigeria, and elsewhere, some successful holders of a B.A. or B.S. degree saved their money, built cheap buildings, and advertised that an entrance examination would be held, for a fee, for a new secondary school. Youth who had failed other entrance examinations took hope and scraped up money at great sacrifice to their elders. To their joy, many passed the "examination" and were shocked at the high fees necessary to matriculate. But many, many left and began new schooling in these inadequate, understaffed, low quality schools. Pass rates on regional examinations continued to fall.

The picture painted above could be duplicated by the thousands. The tragedy of human lives has hardly been told. In Nigeria, governmental regulations attempted to assert controls over such schools. Other countries experienced similar attempts to provide local training or schooling which enjoyed little formal state support.

NATIONAL DEVELOPMENT: IMPORTATION AND MIMICRY

Formidable expansion of schools and educational facilities was the mood of the Sixties. Developing nations bought the notion that formal educational programs were vital to the general developmental process, particularly in the economic and political spheres. Philip Foster, editor for Education and Rural Development, stated: "the idea that schools were the primary vehicle of development was rather an act of faith than a result of solid empirical evidence in the light of recent events. One can only conclude that in many respects, the consequences of educational planning have fallen short of initial expectations and hopes" (1973).

The orthodoxy of the Sixties was a confident expansion of schools, heavy expenditure to move developing nations toward universal primary education, and establishment of universities and secondary schools. Such global educational planning was linked confidently to social and political development. In Nigeria, for instance, The Sir Eric Ashbey Report (Ashbey, 1962, 1964) called for massive expansion and expenditure of "every available penny" in education. The problem of such investment, particularly in higher education, was that planners often ignored other areas of the developing modern sector which were in need of improvement.

In addition, the social and political outcomes for massive formal educational investment were basically unknown, particularly if they supported an alien philosophy.

James S. Coleman, writing in Education and Political Development (1965), stated confidently:

> At first view, education would seem to be the prime determinate of political development as defined above. Only a formal, institutionalized system of modern education can provide the specialized skills and training requisite for effective societal adaptation to the process of continuing structural differentiation in all sectors of a modern society and to the concomitant increase in specialization. Moreover, political capacity is manifestly dependent on modern education.

Or, hear the words of Dean Rusk, in his address at the opening of the Department of State, in 1962:

> So today in this country we recognize that education has a variety of roles to play. The democratic institutions cannot exist without education, for democracy functions only when people are informed and are aware, thirsting for knowledge, and exchange of ideas.
>
> And in underdeveloped economies education itself stimulates development by diplomatically demonstrating that tomorrow need not be the same as yesterday, that change can take place, that the outlook is hopeful.

The messages of the Sixties were clear--educational facilities should be expanded in developing countries. National educational planners surveyed their own respective country's needs and were amazed at how far they had to go to achieve even a semblance of sameness with developed nations, particularly the United States of America. What wonders these developed countries had achieved could be attained, obviously, through formal education. Initially, the creed was to develop more of the same--formal schools. It did not take long, however, to question the credo and specialists developed new and improved

strategies to assess manpower needs more realistically (Tingergen & Bos, 1965; Institution-Building and Education: Papers and Comments, 1967).

In Nigeria particularly, but in other countries such as India, Pakistan, Ghana, Kenya and others, a disturbing phenomenon occurred. Hundreds first, then thousands of secondary school leavers, heady with their secondary leaving certificates, filled with knowledge of biology, physics, Ivanhoe and Charlotte's Webb, mathematics and world geography, sought lucrative positions in society. On the one hand, they were unprepared in their skills, knowledge, and attitudes to return to their rural and humble roots; on the other hand, they were unprepared for the attitudes of employers, particularly the government agencies, who now viewed these qualifications as unsuitable for most occupations in the modern sector. School leavers migrated to the cities in hopes of finding higher paying jobs. This incursion into the cities created clusters of dissident youth who were upset that their great educational investment ill-prepared them for real life. Exporters of educational systems remained confident. Return to Dean Rusk's words again:

> Knowledge can be found by the few, but it must be applied and distributed by the many . . . For education is an investment, and a good one. It yields a high rate of return.

Others, such as S. C. Dube (1976), commenting on the growth of Indian education, spoke of a similar problem in blunt words; that is, Indian education became an "acephalous monster", because it lacked organization, planning, leadership, and centralized control related to national ethics and needs.

The era of concerted planning was to emerge post-haste.

THOUGHTFUL DIAGNOSIS AND PRESCRIPTIONS: DYSFUNCTIONAL SYSTEMS

S. C. Dube, Director of the Indian Institute of Advanced Study, has for the past ten years been engaged in research on the problem of development of the Third World. He has written an excellent monograph, "Theories and Goals of Education: A Third World Perspective" (1976). He stated that the national policies of developing countries set sights much higher than basic literacy and numeracy goals and attempted to attain levels of development and affluence of the countries of Western Europe and North America. Third World countries placed very high priority on formal education as a means to contribute to national development and hopefully to social transformation. Problematically, most of the developing countries were desperately poor and, after a few years of experimenting with the well-meant plans of "developers", they recognized that this road was one of "heartbreak and frustration", to use Dube's words. Approaches based on philosophical and social foundations of education which were out-dated in the Western World ten years previously, continued to be the tenants of educational expansion of many of the elites in developing countries, long after these were reliable foundations in Western countries.

What was needed was a critical and penetrating analysis of the social and economic needs of the developing countries themselves. The Third World's "decision-makers" in the realm of educational planning utilized many experts from Western nations eager to try out new analytical schemes of development.

In October 1962, a book by the Organization for Economic Cooperation

and Development, titled, Forecasting Educational Needs of Economic and Social Development, was published (Parnes, 1962). It spoke of "human capital", "investment of man", "contribution rates of education for specified growth targets", and "rates of return". The document called for careful planning for educational expansion as well as for long term planning:

> This report explores some of the conceptual and methodological problems involved in making such an assessment of educational needs and suggests alternative approaches that appear to be useful and feasible. The emphasis will be on methods of preparing estimates of the educational system and converting these into estimates of future enrollments. However, the problem involved in estimating the costs of a prescribed program of educational expansion will also be dealt with briefly.

A few voices cried out warning of such expert evaluations. Writers and researchers began to be concerned not only with the ethics of planned change, but also the results of this new manpower training to meet emerging manpower shortages. Potential philosophical conflicts between education in free societies and planning for change were discussed, especially in relationship to the idea of the development of a brainpower industry which could become the instrument for building national economic and military programs. It was one thing to assume that education would contribute to economic and political growth indirectly, but what if planned change opened up educational opportunities only to a few select persons? What if such grand ideas of enabling all individuals to realize their own potential were believed by the masses, but not provided for in universal education? Who, therefore, should define new programs, new structures, which would create cultural change?

Other questions were asked: Which values of the traditional society in developing countries would be preserved? Who should exert leadership in order to bring about education and schooling which would guarantee futures for most citizens, and which would take into account the desperate poverty and unhappy human conditions of so many? At that point in time, Ivan Illich (1971) warned of the dangers of universal schooling for South American countries. He called for life long education and more equitable distribution of State funds for education. Paulo Friere, in his disturbing book, Pedagogy of the Oppressed (1968), spoke out for ways in which the poor and uneducated in South America could exert counter controls for self-determination. Others such as Goodman, Holt and Silberman were just beginning to express similar ideas, but were not heeded by developmental thinkers.

Some argued that planned change need not be undemocratic (Bennis, et al., 1961); others explored the idea that fast economic growth need not occur without loss of individual freedom and values (Cowan, 1962; Pye, 1962). Colin Turnbull, in his well-known book, The Lonely African (1962), spoke in the conclusion section about the need to consider the advantages of bringing about social change, yet leaving intact the tribalism (nation states) in Africa. These and other writers in the Sixties shared a common concern. At what price would modernization and development occur? Would the rub of one culture against the next destroy the very essence of one, particularly if developing nations were attempting to fund, demand and solicit means for social and economic change?

While these concerns were being expressed, rapid educational expansion took place in most developing countries and these educational programs were often high-priced copies of Western schools.

In most of the ex-British colonies, accelerated expansion occurred in secondary education and university education soon after Independence. These new institutions, by their very nature, that is, representing Western ideals and technologies, isolated themselves from the traditional mainstream of the populace. Youth who were fortunate enough to pass examinations which gave them entree to such schools soon became avid supporters of their own position and discontented with the old ways. Such school cultures which developed were realistically isolated in other ways and contrasted sharply with their surrounding environments. They were fishbowls of affluent living as viewed by the common man in the village. Isolation of this sort was much more acute in developing countries than in the West where schools were in fact neighborhood schools, where P.T.A. type organizations abounded, where taxes were taken from the pockets of local citizens for local educational projects. Conversely, in Nigeria for instance, the schools were usually showplaces, supported by foreign monies and personnel, by regional government monies, and grants-in-aid. Because most of these institutions were boarding schools, they even more sharply created a whole sub-culture group of youngsters whose entire way of life was altered during the five emersion years to become thoroughly Westernized. James S. Coleman wrote in his introduction to Education and Political Development (1965):

> This characteristic isolation presumably gives the schools a more powerful role as political socializers. From the standpoint of broader societal interests, however, what may be gained by more concentrated and undistracted--and therefore effective--socialization of the educated few may be lost by a deepening of the gap between the elite and the mass.

Permit a reference to the microfilaria and the acephalan at this point. The injection into the bloodstream of many developing nations of masses of new ideas, particularly the idea that schooling will create modernization and affluence, led to a progressive constriction of ideas in regard to how schools should be related to local needs. Generations of graduates of colonial systems filled the major pipelines of the nations' infra-structures. Products of colonial schools, neo-colonial in attitude, called for more of the same foreign expertise. The educational systems swelled to gigantic proportions, consuming large percentages of the nations' available national funds, yet by their nature, these schools became burdens to carry, deformations to be endured. Or to return to the acephalan, new school bodies formed on those of others--and the systems remained basically immobile, submersed in a continual rhetoric of expansion and development.

CURRENT DILEMMAS AND FUTURE PROSPECTS

When a researcher attempts to gain some perspective of the historical events which have shaped institutional planning and national development, the researcher rapidly becomes aware of the vastness of the task and of the need to narrow the field of endeavor. The crises which have developed in the educational systems of the Third World countries are

being reported by many and a number of current dilemmas emerge. In addition, some hopeful suggestions are being made for future development. The present era is one of sensitive concern for the needs of nations, for the need for preservation of cultural values, and for improved ways of offering assistance in the process of development, utilizing "indigeniety" as an operating principle.

Philip Foster, a prolific researcher and writer in the sphere of education and economic development, has recently penned ideas which deserve our serious attention. In his article, "Dilemmas of Educational Development: What We Might Learn From the Past" (1975), he outlines some important considerations. Foster first suggests that neo-colonial attitudes persist, that national elites have picked up on the idea that they are indispensable agents who, through a centralized mechanism, will bring about change through education. Foster suggests that what is needed is a devolution of this decision-making authority, away from centers. He suggests that communities can and should have more voice in planning and in evaluating education according to their unique needs. He even suggests that communities may opt for funding less formal education and receive in its place new ports, a bridge which would bring trade, or an irrigation system which would expand farming. In other words, local needs should be considered when investment is contemplated.

Another problem of colonialism and of neo-colonialism is that it fragments tribal or ethnic concerns and that traditional social stratifications are shattered. Foster suggests that rather than continue to have "pre-eminent stress" placed upon education as a means of access

to the modern occupational sector, economic factors should receive greater consideration. Hopefully, such a choice would keep social strata more intact.

Foster refers to an "explosive model of education" which explains that decreasing educational opportunities for youth, far from leading to a decline in the demand for education, leads to further expansion of education (1975). What can be done? Most governmental agencies, particularly if they are "political" in nature, listen to the clamor for more schools, and unhappily succumb and build these schools. Political survival dictates such a move. But with exploding population growth because of improved health conditions and pre-natal care, even this explosion in school building hardly keeps up with the emerging populations' demand for universal primary education, an idea well learned from the affluent West. Foster suggests that new ideas must emerge which support investment in future occupational success and which are not solely predicated on formal schooling. He suggests that fees should be raised in primary education, thus delimiting the number who could afford the luxury. Finally, he suggests that educational systems should relate much more realistically to economic realities and economic development. Certainly, education for political development should be left in the hands of local and state people, rather than be proposed by social scientists from alien cultures. Enough of this train of thought. Foster, however, struggles with ideas which relate to the realities of social and economic survival and the role education plays in this realistic battle to keep alive.

What Foster has done is to open up a box of ideas, hopefully not Pandora's, relating to the future of education. There is no reason schools cannot take on new tasks which, for instance, take children out of the classroom part of the day to work on their own farms, to learn trades, to help with village health care and literacy. Julius K. Neyere said, "Our education must counteract the temptation to intellectual arrogance, for this leads to the well-educated despising those whose abilities are non-academic or who have no special abilities, but are just human beings. Such arrogance has no place in a society of equal citizens" (1968). There is no reason education should not be stressed for employed adults, and that all through their lives they would have access to personal improvement. There is no reason why higher education should consume not only the lion's share, but the hyena's share of development budgets.

With the rising world population, educational planners within developing countries will and must take hard and long looks at what formal education hath wrought. Dwindling resources for the earth's peoples will need to be seriously considered, particularly when disproportionate capital and resources are invested in formal schools. Developing countries will continue to need high level intellectuals, researchers, and philosophers, but not at a cost which bankrupts. Some researchers are suggesting that investment in new alternative types of primary education for children and adults has large payoffs in the economic and political sectors.

Ideas such as life long education are being considered, non-formal

educational systems are being experimented with widely. What about the quality of life of the masses? Will the future educational systems provide expanded means in "human resources" education which will touch the lives of more than a few, and relate to improvement of living and occupational success.

Developing countries must "brave it out" and not be slaves to some vague cult of "intellectual standards", and "... hesitate to follow courses of study which will meet local needs, because qualifications based on them might not be accepted internationally" (Cookey, 1976). Developing countries should consider limiting expenditure in some areas of higher education which require vast sums to service; rather, send some of their people abroad at much reduced cost to specialized universities with long traditions of research and development to learn new skills. Additionally, developing countries should make the teaching profession more attractive by means of improved rewards and incentive systems. These should exist also for those who do go abroad, so that they will return to help their own countries. Sensitive guidance and advice, and recruitment will need to occur for the vast number of secondary school leavers in order to utilize them in various mid-level technical occupations.

The rural areas of developing countries have what might be termed a case of multiple deprivation. Educational means, particularly flexible non-formal systems, may be the answer to provide for many of their needs, and for growth organically (Non-Formal Education. A.I.D. Bibliography Series: Education and Human Resources, 1975). Examples of

non-formal education includes programs for rural people that are flexible, meet local needs, in apprenticeships, on-the-job training, work-related school programs, skills learned in military situations, or industrially supported programs. These programs often do not require high recurrent expenditure, can be carried out by para-professionals, or practitioners, can utilize peer planning, can harness voluntary groups, special interests groups, youth groups, and religious organizations. Non-formal education is often problem-solving in nature, and provides information which leads to immediate improvement of rural life. Such programs are often interdisciplinary and enhance spread of information about nutrition, agriculture, and family planning.

Developing nations should recognize that education of its citizenry is a life-long process, and an immediate process relating to immediate life needs. Formal and non-formal education systems could provide flexible programs, if they are harnessed together wisely.

Finally, it should be noted that a wide variety of educational experiments are being carried out today in Tanzania, Kenya, Nigeria, Jamaica, India, and Western Uganda, some showing dramatic economic returns. What is being learned in these experiments must be pulled together and shared with other developing nations. Hopefully, this information will interlock the rural and urban communities, with their unique concerns, into symbiotic economic and social relationships. Careful attention will need to be given to communication means which enhance information flow from rural communities to the urban university centers, and to international developers abroad. The peasant must have

a voice, and the field worker can provide important information about means of improvement related to unique local conditions. Expertise of the local farmers and craftsmen should be married to those of the new technologies.

Certainly, much care will be needed not to continue to accept foreign assistance and advice which does not take local cultural needs into consideration. As new strategies are developed, these will need to be carefully tailored to make the consumer/participant more self-reliant and retaining local pride. These strategies will need to value adult workers and their need for continued community education throughout their lives. Such strategies should assist all members of society to become more meaningfully involved in personal and group growth. Women do the lion's share of most subsistence agricultural work in developing countries; therefore, significant efforts should be made to provide them with both formal and informal agricultural training to enhance productivity and trade development. Education of the future will be the marriage between education in school and throughout life. Developers will need to take special care to develop sound theoretical approches in developmental schemes.

With special respect to the writer's personal university mentors, a section of John Hanson's and Cole Brembeck's book, Education and the Development of Nations (1966), is here reproduced. Though this statement is more than ten years old, it is highly pertinent for theory formation regarding education for development at this time, and will have continued impact for the future.

Badly needed are educational programs based on the analysis and synthesis of our accumulated experience or on experimentation and imagination inspired by a reasonable and coherent theory. Whatever precise shape such a theory shall take, it must certainly meet the following requirements:

1. It must be built upon a concept of social and situational relevance. An educational theory built upon such a concept would not be satisfied by current vague exhortations to "bear in mind the social facts and aspirations," but it would require delineating in rigorous terms their programmatic implications.

2. It must clarify the concepts of modernization or development and the goals they involve. Sound theories are clear theories, and goals must be clearly enough formulated and understood to produce consistent programs of action rather than mere diffuse activity.

3. It must provide for selection and balance. It must provide a basis not only for choosing between education and other sectors of the economy and between benefits to present and future generations. It must, in short, provide the grounds for establishing priorities in an economy of scarcity.

4. It must encompass what is known of the dynamics of change and reconstruction. The resistance to innovation and the persistance of inappropriate programs, both of which have been chronicled in this volume, will yield only to the best that is known about inducing change. A sound theory must further provide a basis for establishing administrative structure capable of initiating and supporting change.

5. It must allow for continuity in change. Change should be a continuous process, and when successive steps and reinforcements are not provided for it, slippage generally occurs. However, if everything could be changed simultaneously, tragic dislocations and disorganization would follow. A sound theory will provide bases for choosing between strategic elements to be changed and stabilizing elements to be retained.

6. It must be economic, working within de facto limitations. It must establish economic criteria in the usual sense of the term--for maximum use of capital facilities, distribution of recurring revenue and the like. It must also establish criteria in a more sophisticated sense of the term--the "economics" of achieving varied ends through varied means in a single system.

7. It must identify and clarify the significant variables. Much initial theorizing and most research that has been done has employed such gross categories as "primary schools," "take-off-stage economics," or "rural education." It is urged that the categories employed as variables should not disguise or conceal the most significant variables that may account for progress or frustration.

8. It must not be confined by rigid or outmoded distinctions and categories. A distinguished scholar recently commented that we must not confuse literacy training with education; for our purposes it may be even more important that we not equate education with schooling. Certainly the scope of an adequate theory will at least embrace hypotheses combining work-experience with school experience, weighing in-service training along with pre-service formation.

9. It must avoid the pitfalls of simplicism. It must be genuinely interdisciplinary in character; it must involve the coordination of educational change with other aspects of development; it must eschew reliance on stereotyped panaceas to treat complex ills.

10. It must be amenable to research and promote further study. It must suggest hypotheses that lead to feasible investigation, hypotheses that can be allowed or disallowed on the basis of evidence, and that are capable of further amplifying our knowledge or modifying theory.

11. It must stimulate imagination and ingenuity. Progress is based not on blind or routine repetition but on imaginative insights that a good theory should stimulate. Educational theories that leave no room for ingenuity in the development of programs are unlikely to foster this quality in new generations.

12. It must be democratic in the sense of involving the competence and engaging the commitment of as wide a range of participants as possible. Good theory of education, like good theory of change, suggests appropriate areas for the devolution of authority to those most immediately and directly concerned.

REFERENCES

Ashbey, E. Mission and challenge of West African universities. Teachers College Record, Dec. 1962, 227-32.

Ashbey, E. African universities and western tradition. Cambridge, Mass.: Harvard University Press, 1964.

Asquith Report, The. Report of the commission on higher education in the colonies. London: His Majesty's Stationery Office, 1945.

Bennis, W. G., et al. (Eds.). Planned change. New York: Rinehart and Winston, 1961.

Coleman, J. S. (Ed.). Education and political development. Princeton, N.J.: Princeton University Press, 1965, 16-25.

Cookey, S. J. The training and supply of middle-level personnel. Prospects, 1976, 6, 2, 236.

Curle, A. Educational problems of developing societies. Boston: Praeger Publishers, 1973.

Cowen, D. V. African legal studies: A survey of the field and the role of the United States. Law and Contemporary Problems, 1962, 27, 4, 562-565.

Dore, R. The diploma disease: Education qualification and development. Los Angeles: University of California Press, 1975.

Dube, S. C. Theories and goals of education: A Third World perspective. Prospects, 1976, 3, 4, 349-362.

Foster, P. Dilemmas of educational development: What we might learn from the past. Comparative Education Review, October 1975, 378-402.

Foster, P. Education and rural development. London: Evans Brothers, Ltd., 1973.

Freiere, P. Pedagogy of the oppressed. New York: The Seabury Press, 1968.

Hanson, J. W., & Brembeck, C. S. Education and the development of nations. New York: Holt, Rinehart & Winston, 1966.

Illich, I. Deschooling society. New York: Harper & Row, 1971.

Institution-Building and education: Papers and comments. A joint publication of The Comparative Educational Administration Subcommittee on CAC and The University Research Program in Institution-Building, 1967 (Monograph).

King, E. Other schools and ours: A comparative study for today. London: Holt, Rinehart & Winston, Inc., 1967.

Nyerere, J.K. An address by the President of the Republic of Tanzania at the inauguration of the University of East Africa. West African Journal of Education, Feb. 1964, Vol. III.

Nyerere, J.K. Education for self reliance. Ujamaa: Essays on Socialism. London: Oxford University Press, 1968.

Parnes, H. S. Forecasting educational needs for economic and social development. Paris: Organization for Economic Cooperation and Development, 1962, 11.

Pye, L. Discussion. Human Organization, 1962, 21, 2, 146.

Rusk, D. Address at the opening session at the Department of State. Policy Conference on Economic Growth and Investment in Education. Paris: OECD Publication, February 1962, 17, 20.

Timbergen, J., & Boc, N. C. A planning model for the educational refinements of economic development. Econometric Models of Education. Paris: Organization for Economic Cooperation and Development, 1965.

Turnbull, C. M. The lonely African. New York: Simon and Schuster, 1962.